W2MMD

Gloucester County Amateur Radio Club

1996 Officers

President	Bob Krukowski	WA2UDO
Vice President	Art Strong	KA2DOT
Treasurer	Al Arrison	KB2AYU
Recording Sec.	Sam Rosenberg	N2DWK
Corres. Sec.	Jack Stauffer, Jr.	KA7LAX

Directors

Three-Year	Walt Seitz	KB2JCG
	Pete Butler	KA2DZF
Two-Year	Joe Wells	N2KLE
	Goldie Rosenberg	N2YNB
One-Year	Open	
	Open	

Trustees

Four-Year	Stu Cleveland	N2WUP
Three-Year	Barbara Bielecki	N2SBP
Two-Year	Chris Chamberlin	N2IVN
One-Year	Charlie Olinda	N2SRQ

GCARC Meetings

General Membership:

8 p.m., 1st Wednesday every month, Deptford Elks Lodge, Highland Ave., one block from Egg Harbor Road.

Board of Directors:

8 p.m., 3rd Wednesday every month, GCARC site, Harrison Twp. 4-H Grounds (approximately one mile south of Mullica Hill on Rt. 77).

1996 Committee Chairpersons

Advertising	Ray	N2WHL
ARES/RACES	Chic	WA2USI
Awards	Jack	K2ZA
Banquet	Bob	WA2UDO
Budget *	Bob	WA2UDO
Callbook Info.	John	K2JF
Clubhouse Site *	Stu	N2WUP
Constitution *	Ken	KN2U
Crosstalk	Greg	WN2T
	Don	N2WFM
	Kyle	KB2RVY
Data Processing	Charlie	K2PQD
DX	Open	
Field Day *	Art	KA2DOT
Hamfest *	Open	
Help	Ken	KN2U
Hospitality *	Donna	
Legislation	Open	
Membership *	Sonny	WB2DXB
Nets	Dave	N2TVR
Nominations	Bob	WA2UDO
Publicity *	Ray	N2WHL
Repeaters *	Chuck	WA2TML
Scholarships	Greg	WN2T
Special Services	Al	N2FJQ
Special Events	Walt	WB2OYQ
Sunshine	Miriam	KB2EUA
Testing	Bill	NT2N
Technical	Open	
Training	Chic	WA2USI
TVI	John	K2JF
4-H Parking	Open	

(* Standing Committee)

NETS

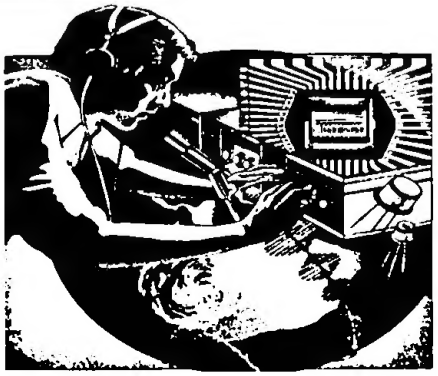
ARES/RACES - Sundays, 2200 Hrs
(147.780/180 & 223.06/224.66 Repeaters)

10 Meter - Sundays following the ARES/RACES net (28.350 Mhz)

Club Repeaters

147.780/180 Mhz 223.06/224.66 Mhz
447.100/442.100 Mhz (CTCSS 131.8)

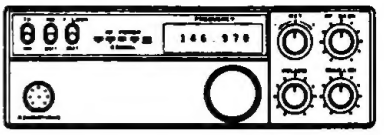
SPECIAL SERVICE CLUB ARRL



GLOUCESTER COUNTY AMATEUR·RADIO·CLUB NEW JERSEY

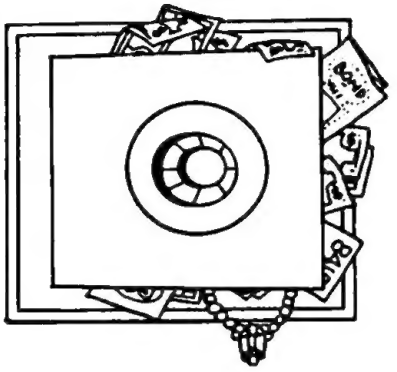
GCARC
AUG.1996

CROSSTALK



GCARC Hamfest August 25

Greetings! Once again I am one of the chairpersons of our hamfest, and I have the following information to report.



Prizes. This year, the main prizes for the fest are:

- **Yaesu FT 10 2-meter HT**
- **Kenwood TM641A 2 meter FM 50 watt rig**
- **Astron RS 20A Power supply**

We also have some additional door prizes to be given out on the day of the hamfest.

Food. We will have an outside vendor this year, who will take care of our food needs for the day.

Tickets. We will NOT, repeat NOT, be doing a mass mailing of hamfest tickets. If you want tickets mailed to you, YOU MUST REQUEST THEM.

Flyers. We have been distributing flyers for about a month now. If you have a local Radio Shack or something, please get in touch with me, and I'll get some flyers to you for distribution.

People. *HELP, HELP, HELP, HELP!* I have about one-third of the people needed to run the hamfest. ONE THIRD. What's the problem here? Don't wait until the last moment to volunteer.

Let's talk about the hamfest for a moment. Why a hamfest? What is all the bother? Put simply, without the hamfest there is no repeater and no club. The hamfest is the major source of income for the club. Soooo, you want to be a member of the GCARC? **Support it!** The hamfest is also a fun day. Here's is an excellent opportunity to meet new and old friends, or find a piece of gear.

Want entertainment? Watch me run around like a mental patient trying to keep up with everything! It's always a bright sunny day (we won't mention the "R" word here!), and everyone has a good time.

Please don't give excuses as to why you can't help. Selling at the hamfest? How about coming down Saturday to lend a hand with setup? If selling, how about staying for 45 minutes or so to help with the cleanup at the end of the fest? A wise man once said that many hands make a task easy. So, RUSH to that phone, and give me a call and let me know that you want to be a part of South Jersey's largest and BEST hamfest.

73, John, KA2EZN

Late News: From early reports, the 4-H Fair was a record-breaker! Let's make the Hamfest even better!

SALE

The following items are available to the highest bidder:

One 2-Mtr KLM Model 2M8, 8-element beam on a 7.25' boom;

One 6-Mtr KLM Model 6M5, 5-element beam on a 11.75' boom.

Both antennnas brand new and fully assembled. Available as a result of changed antenna plans for the GCARC antenna site.

Minimum bid on 2-Mtr beam is $75.00; Minimum bid on 6-Mtr beam is $175.00.

Procedure: Submit a seaied, written bid, which must be postmarked no later than midnight, August 7, to the GCARC, Box 370, Pitman, NJ 08071. Mark the envelope, "Antenna Bid."

Epson LQ-510 dot matrix printer. $35.00 or BO.

HQ-1 Mini Quad, 6 mtrs to 20 meters, 2 elements. Needs repair ... will sell cheap! Make offer.

Also, want a 486-66 Mhz computer.

Ed - WA2PFC

Uniden SPU-48N handheld and rapid charger – in original boxes. Will sell both for $400.

Mike Mollet,

QST dE W1AW

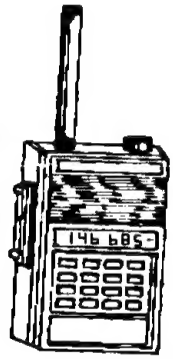
ARRL Bulletin 46
ARLB046

From ARRL Headquarters, Newington CT, July 23, 1996:

To all radio amateurs...

SB QST ARL ARLB046

Thanks to all amateurs who faithfully relay W1AW and other bulletins. Amateurs are reminded to maintain the original Bulletin ID number, BID, on all bulletins. BID integrity will greatly aid in decongesting sometimes overworked HF, VHF and UHF packet networks.



(Tks N2CQ for Info.)

News

NEWSLine Amateur Radio News
July 22 1996

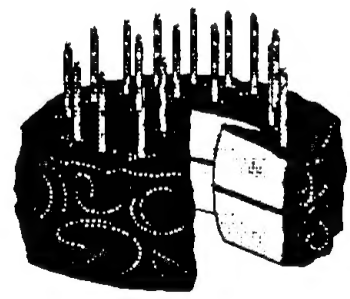
Hurricane Bertha Hits NC

Packing winds in excess of 100 miles per hour, hurricane Bertha tore into the North Carolina coastline on Friday July 12th. The storm made landfall near Cape Fear and then battered a string of coastal towns as it roared northward. Roofs ere ripped from buildings, roads were flooded and communications to many areas was knocked out. Bertha wasn't the strongest hurricane to hit North Carolina but it still managed to bring plenty of problems to residents and vacationers.

Continued next page...

Stuff for Xtalk?
Please send on packet to WN2T via "Pitman" (N2SRO) on 145.770 or E-Mail to: Pott@voicenet.com. Deadline for September issue: Aug. 25, 1996

Happy Birthday for the month of August from all the members of GCARC!



CALL	FIRST	LAST	DAY
WA2DUV	Willie	Ustaszeski	2
N2EDK	James	Thompson	5
K2CR	Jack	Koch	13
KB2RGX	John	Lachenmayer	15
N2WIA	Dennis	Walton	19
K2OWE	James	Mollica Sr.	23
WB2GSF	Harry	Jackson	26

Tks Charlie Sketchley, K2PQD, Database

More than a quarter of a million people fled North Carolina's beaches in advance of the storm. Radio amateurs throughout the state went on full alert.

As expected, their services proved to be valuable. "Many times, communications were lost in some of the smaller towns. The coast areas were hardest hit. And I know for a fact that with my internet connection, the stuff, the phone lines went down in that area. They totally got wiped off the air. Telephones also were reported down." Greenville's Chuck Martin, KD6NUJ is one of hundreds of amateurs who provided communications support during the hurricane. Some of that support included helping the Red Cross with operating shelters, which filled up with more than 14,000 people.

"Ham radio operators actually provided communications from those shelters to the other hams. So that they could actually get the supplies and stuff that they needed. The head count and also notify people in the area as to where their people might be in the shelters." But that's only part of what North Carolina hams did to manage the emergency. 75,000 people lost power.

Ray Mahorney, KB4EJK, is active with Onslow county's amateur radio emergency service. He says radio amateurs helped public safety officials whom Bertha left in the dark: "In many instances county emergency communication centers has lost power, so hams were the only means by which communications were disseminated there for quite a while." Bertha was an unusual storm because it hit North Carolina so early in the hurricane season.

Nonetheless, hams in the state were ready when the storm moved ashore south of Wilmington July 12th. Hams had been holding organizational nets and planning their responses. Ray Mahorney says one of the biggest challenges amateurs faced was fulfilling two communications needs simultaneously: "It was shelter communications and making sure that the National Weather Service Offices were provided with the best information they could have from ground sources."

In the northern part of North Carolina, GaryPearce, KN4AQ, says amateurs manned emergency operations centers and the state EOC in Raleigh. Hams also maintained a continuous high frequency net until after the hurricane s main danger had passed. Ray Mahorney says North Carolina hams anxious to sharpen their emergency communications skills view Bertha as a learning experience: "The hams performed well, however, as with any emergency communications exercise, or event, there is room for improvement."

North Carolina Governor James Hunt thanked radio amateurs throughout the state for their efforts during Bertha's attack, praising their devotion to public service. By Saturday morning the 13th, the storm's top winds weakened to 75 mph as it stalled over land. By then, more almost 400,000 customers had lost telephone and electrical power in the Carolinas. Many hams involved in storm related emergency communications were forced to use portable and mobile radios to stay on the air.

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Propagation Notes de John, K2JF

I have prepared a collection of articles on propagation starting with the Ionosphere;

If you want the articles to continue please let me know; otherwise I will assume there is not sufficient interest to continue.

In the early days of radio, mathematical physicists reasoned that it would be impossible to receive radio signals at very great distances because of the attenuation resulting from the absorption of the energy by the Earth. When it was found experimentally that signals could be received across the Atlantic Ocean, the work of the physicists was questioned. Their result was correct, of course, for the problem to which it applied namely, the propagation of ground waves around a curved Earth surrounded by free space. Obviously, some other means of propagation had to exist. The experimental evidence of trans-atlantic communication proved only that the assumption of an earth surrounded by nothing but free space was unjustified. It was then suggested by both Heaviside and Kennelly, the one an English scientist and the other an American, that there might be a source of ionization -- the Sun!

Although the Sun is composed of the same elements that are to be found on the Earth, these elements exist in such a violent state of solar activity as to remain constantly in a molten or gaseous state (plasma). Probably because of intense internal stress and the play of atomic forces on a gigantic scale, the Sun constantly emits huge accounts of energy in the form of heat, particles, and electromagnetic waves. Eruptions at the surface of the sun have been noted to shoot immense clouds of hot gases to distances of half a million miles above the surface. Another disturbance of the Sun's surface is the appearance of sunspots, which have particular effects on the amount of ultraviolet radiation, and hence on the extent of ionization caused by this radiation.

Effects of Sunspots

During periods of high sunspot activity (we are just getting into cycle 22) the extent of ionization of the various layers is greater than the average. The sun sunspots are dark areas which appear on the disk of the sun, and although their relative darkness would seem to indicate lower temperatures and lower ultraviolet radiation, they have bright gaseous clouds about them, and the processes involved in the formation of the sunspots probably produce vast amounts of ultraviolet energy. The sunspots usually appear in groups and follow a more or less definite cycle of activity with an average time interval 1 of 11.1 years between the maxima of two consecutive cycles. Magnetic storms on the Earth also are related to the presence of large sunspots.

Dellinger Fade

Bright visible flares on the Sun's disk instantaneously produce great effects on the ion density of the various ionospheric layers. This effect is known as the Dellinger Fades, or Sudden Atmospheric Disturbance (SAD's). Great increases are noted in the ionization produced at low levels of the ionosphere as the result of these flares.

The next article Part 2 will be: Formation of an Ionized Layer.

August

				1	2	3 ARRL UHF Test; No. Amer. Qso Party; QRP Summer Daze; 10-10 Phone Net; YO DX Test
4 20:00 ARES/RACES 20:30 10 mtr Net - 28.350 Mhz	5	6	7 **GCARC General Membership Meeting 20:00**	8	9	10 Maryland QSO Party;Worked All Europe CW; Fest - Lewistown, PA
11 20:00 ARES/RACES 20:30 10 mtr Net - 28.350 Mhz	12	13	14	15 VE Exams Bellmawr @ 7 p.m (Doors open 6:15 p.m.)	16	17 ARRL 10-Ghz Test; KCJ Test; N.J. QSO Party; No. Amer. QSO Party; SARTG RTTY Test; SeaNet Test; TOEC Grid Test Fest - York Pa; Fest - Oakland, NJ
18 20:00 ARES/ RACES 20:30 10 mtr Net - 28.350 Mhz Fest-York, Pa.	19	20	21 **20:00 GCARC Board of Directors Mtg**	22	23	24 Summer QRP QSO Party; Utah Centennial QSO Party; Fest - Bridgewater, NJ
25 20:00 ARES/RACES 20:30 10 mtr Net - 28.350 Mhz **Hamfest-GCARC, Mullica Hill 4-H Fair Grounds 8 - 3 p.m.**	26 **Deadline Sept. XTALK!**	27	28	29	30 SUMMER	31 Hiram Percy Maxim Birthday Celebration

1996 S M T W T F S